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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/521,798	01/21/2005	Robert J. Lowles	PAT 53966W-2	5057

26123 7590 04/03/2008
BORDEN LADNER GERVAIS LLP
Anne Kinsman
WORLD EXCHANGE PLAZA
100 QUEEN STREET SUITE 1100
OTTAWA, ON K1P 1J9
CANADA

EXAMINER

CARTER III, ROBERT E

ART UNIT	PAPER NUMBER
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2629

NOTIFICATION DATE	DELIVERY MODE
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04/03/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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ipinfo@blgcanada.com
aarmstrongbaker@blgcanada.com
akinsman@blgcanada.com

Office Action Summary	Application No. 10/521,798	Applicant(s) LOWLES ET AL.	
	Examiner ROBERT E. CARTER III	Art Unit 2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 February 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

The RCE filed on 02/28/2008 has been entered and considered by examiner

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 1-7, and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sawanobori et al. (US Patent # 5,936,668) in view of Windsor et al. (US Patent # 6,512,607).

As for claim 1, Sawanobori et al. (Figs. 6, 10) discloses:

A method for indicating an event change (Col. 7, lines 14-18) for a mobile device in a first area (17b) of a viewing area of a liquid crystal display (17) located in the mobile

device, the LCD viewing area having a second area (17a), surrounded on two sides by said first area, for displaying images.

the method comprising the steps of:

providing control information (input from CCD 15);

determining said event change for the mobile device from a list of event changes (Col. 4, line 66 – Col. 5, line 4) based on said control information;

determining a first drive signal for said event change; and

supplying a first group of pixels in said first area with said first drive signal,

said first group of pixels (pixels in top portion of first area 17b) comprising at least one pixel, thereby controlling a colour

of said first group of pixels with said first drive signal.

Sawanobori et al. states in Col. 4, line 66 – Col. 5, line 4 that the first area is for displaying information related to the image currently being displayed, like the date of image, use of strobe, and number of frames used, additionally information related to the device itself can be displayed like the amount of battery. Sawanobori et al. suggests that any other information relating to the image or the device itself could also be displayed. Fig. 10 shows a specific example of a frame counter in the first area (17b) which would change with every frame displayed in the second area. Each new frame displayed is an example of an event change, and necessitates the first drive signal be set to a certain value corresponding to that frame, thereby controlling the colors of the first group of pixels.

Fig. 5 shows a specific example of a strobe indicator in the first area (17b). A user pushes the strobe button indicating an event change (strobe on or off), and necessitates the first drive signal be set to a certain value corresponding to display or non-display of the strobe indicator, thereby controlling the colors of the first group of pixels.

Fig. 5 further shows a specific example of a battery indicator in the first area (17b). The battery voltage sensor detects a change in battery voltage, indicating an event change, and necessitates the first drive signal be set to a certain value corresponding to updating of the battery display indicator, thereby controlling the colors of the first group of pixels.

Sawanobori et al. does not teach the second area being surrounded by the first area.

In the same field of endeavor (i.e. mobile devices with liquid crystal displays) Windsor et al. (Fig. 5A) discloses:

A first area (24) of a viewing area of a liquid crystal display (20), the LCD viewing area having a second area (26), surrounded by said first area, for displaying images.

Windsor et al. further teaches that the first area can contain a different image or a permanent image from the second area (Col. 4, line 58 – Col.5, line 2).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the LCD display in Sawanobori et al. by adding two more sides to the first area such that it surrounds the second area as in Windsor et

al. to give additional area for advertising and other branding features (Windsor, Col. 2, lines 9-15).

Sawanobori et al. as modified by Windsor et al. does not teach the device being a mobile communication device.

However, the examiner takes Official Notice that integrating mobile communication devices such as cellular telephones with digital cameras is well known in the art.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the mobile device of Sawanobori et al. as modified by Windsor et al. by integrating it with a mobile communication device such as a cellular telephone to enable wireless transfer of digital images between any two mobile communication devices.

As for claim 2, Sawanobori et al. teaches:

Wherein the step of providing control information comprises the steps of:

inputting (15) said control information to an electronic device (The CCD 15 captures an image, which is the control information); and

sending a signal with said control information to an LCD drive circuit (45) from a controlling element (20) of an electronic device (Fig. 6) housing said LCD (a signal containing the control information is sent to the LCD driver to be displayed on the screen) (Col. 4, lines 20-25).

As for claim 3, Sawanobori et al. teaches:

*Wherein the step of providing control information comprises the steps of:
using a software program with control information resident on an electronic device; and
sending a signal with said control information to an LCD drive circuit (45) from a
controlling element (20) of an electronic device (Fig. 6) housing said LCD.*

While Sawanobori et al. does not explicitly teach the limitation of using a software program with control information resident on an electronic device, Sawanobori et al. states that the controlling element is a microprocessor which controls the entire operation of the camera (Col. 5, line 7). Microprocessors are devices that process instructions (control information), and therefore inherently require a software program which contains those instructions to operate. Furthermore, the system controller sends a signal with control information to the LCD drive circuit to control it (Col. 5, lines 58-64)

As for claim 4, Sawanobori et al. teaches:

*A method which comprises the further steps of:
supplying a second drive signal to a second group of pixels (pixels in bottom portion of first area 17b) in said first area, said second group of pixels comprising at least one pixel; and
controlling a colour of said second group of pixels with said second drive signal, thereby creating a pattern within said first area (Each new frame displayed is an example of an event change, and necessitates the second drive signal be set to a certain value corresponding to that frame, thereby controlling the colors of the second group of pixels.).*

As for claim 5, Sawanobori et al. teaches:

Wherein the colours of said first and second groups of pixels are dynamically controlled based on images displayed in said second area of said viewing area (Col. 7, lines 14-18).

The colours of the first and second groups of pixels are based on the frames currently displayed in the second area, and therefore is dynamically controlled based on images displayed in the second area.

As for claim 6, Sawanobori et al. teaches:

wherein said control information is provided at the time of manufacturing an electronic device housing the LCD, or selected by a user during operation of the electronic device.

The device in Sawanobori et al. contains a controlling element (Fig. 6, #20) which inherently requires a software program containing control information to operate, and that program would have been provided at the time of manufacturing. Furthermore, it is well known in the art that a digital camera such as the one disclosed in Sawanobori et al. would have control interfaces to allow the user to input control information. One such control button even appears on the top surface of the device depicted in Fig. 11, although it is not numbered.

As for claim 7, Sawanobori et al. teaches:

Wherein said first drive signal is set to a certain value if an event change has taken place (Col. 7, lines 14-18).

Sawanobori et al. states that the first area is for displaying information related to the image currently being displayed, like the date of image, use of strobe, and number of frames used, additionally information related to the device itself can be displayed like

the amount of battery. Sawanobori et al. suggests that any other information relating to the image or the device itself could also be displayed. Fig. 10 shows a specific example of a frame counter in the first area (17b) which would change with every frame displayed in the second area. Each new frame displayed is an example of an event change, and necessitates the first drive signal be set to a certain value corresponding to that frame.

Fig. 5 shows a specific example of a strobe indicator in the first area (17b). A user pushes the strobe button indicating an event change (strobe on or off), and necessitates the first drive signal be set to a certain value corresponding to display or non-display of the strobe indicator.

Fig. 5 further shows a specific example of a battery indicator in the first area (17b). The battery voltage sensor detects a change in battery voltage, indicating an event change, and necessitates the first drive signal be set to a certain value corresponding to updating of the battery display indicator.

As for claim 9, Sawanobori et al. teaches:

An apparatus for controlling a viewing area of a liquid crystal display comprising:

*a liquid crystal display (17) having a first area (17b) for indication of at least one event change and a second area (17a), surrounded **on two sides** by said first area, for displaying images;*

a controlling element (20) for determining said at least one event change from a set of event changes (Col. 4, line 66 – Col. 5, line 4) and for creating control information corresponding to said at least one event change (Col. 7, lines 14-18).

Sawanobori et al. states that the first area is for displaying information related to the image currently being displayed, like the date of image, use of strobe, and number of frames used. Additionally information related to the device itself can be displayed like the amount of battery. Sawanobori et al. suggests that any other information relating to the image or the device itself could also be displayed. Fig. 10 shows a specific example of a frame counter in the first area (17b) which would change with every frame displayed in the second area. Each new frame displayed is an example of an event change, and necessitates the first drive signal be set to a certain value corresponding to that frame.

and an LCD driver circuit (45) for transmitting signals to said first area based on said control information for indicating said at least one event change.

Sawanobori et al. does not teach a second area, surrounded by said first area.

Windsor et al. teaches:

*An apparatus for controlling a viewing area of a liquid crystal display comprising:
a liquid crystal display (20) having a first area (24) for indication of at least one event change and a second area (26), surrounded by said first area, for displaying images;*

Windsor et al. further teaches that the first area can contain a different image or a permanent image from the second area (Col. 4, line 58 – Col.5, line 2).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the LCD display in Sawanobori et al. by adding two more sides to the first area such that it surrounds the second area as in Windsor et

al. to give additional area for advertising and other branding features (Windsor, Col. 2, lines 9-15).

4. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sawanobori et al. (US Patent # 5,936,668) in view of Windsor et al. (US Patent # 6,512,607) as applied to claims 1-7, and 9 above, and further in view of Heinz (US Patent # 6,298,231).

As for claim 8, Sawanobori et al. as modified by Windsor et al. teaches all the limitations of claim 7.

Sawanobori et al. as modified by Windsor et al. does not teach the event change being one of message received, urgent message received, or new application in use.

However, Sawanobori et al. states that the first area is for displaying information related to the image currently being displayed, like the date of image, use of strobe, and number of frames used. Additionally information related to the device itself can be displayed like the amount of battery. Sawanobori et al. further suggests that any other information relating to the image or the device itself could also be displayed.

In the same field of endeavor (i.e. mobile devices with liquid crystal displays) Heinz teaches displaying a message icon on an LCD display when a new message is received (Col. 1, lines 49-64).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the mobile communication device of Sawanobori

et al. as modified by Windsor et al. by adding the message icon of Heinz, to reduce air time in managing and retrieving messages (Heinz, Col. 3, lines 27-32).

Combining Sawanobori et al. as modified by Windsor et al. with Heinz, therefore, teaches

wherein said event change is selected from group consisting of: message received, urgent message received, and new application in use.

Response to Arguments

5. Applicant's arguments filed on 02/28/2008 have been fully considered but they are not persuasive.

As for the '668 reference, applicant argues:

“the information that is being displayed by the second area is static information associated with the image being displayed and not relating to an event change occurring on, or relating to, the device. Therefore, there is no discussion, or disclosure of an event change, related to the mobile communication device, being indicated to a user as now claimed. If one was to associate the mobile communication device with the camera 188 of the '668 reference, Applicant respectfully submits that no event change with respect to the camera is being indicated, but only the displayed image.”

The information displayed in the second area is not static, and is clearly associated with an event change relating to the device. An event change is determined from a list of even changes based on control information. The control information could be a pressing a button to turn on the strobe, taking a picture to change the number of

frames used, or a change in the voltage of the battery. The state of any of this control information may be stored in the device, but a change in that control information indicates an event change, which requires the device to update the display accordingly, rendering the information in the second area non-static. Furthermore, control information such as state of the strobe, number of frames used (and hence the amount of storage space left on the camera), and state of the battery clearly are event changes with respect to the camera, and not just the displayed image.

As for the '607 reference, Applicant argues:

“this reference does not suggest, disclose, anticipate or obviate the subject matter of determining an event change and indicating any event change on the display area. The '607 reference provides a description of a display overlay whereby permanent images or wording are printed on the display overlay.”

The determination of an event change and indication of an event change on the display area is clearly taught by Sawanobori et al. as outlined in the rejection and response to arguments above. Sawanobori et al. as modified by Heinz teaches all the limitations of the claims except the second display area being completely surrounded by the first display area. Windsor et al. is simply used in the 103 rejection to teach an LCD with a second display area surrounded by a first display area. The fact that the image in the first display area of Windsor et al. is permanent and does not provide any indication of an event change is immaterial. Windsor further provides excellent reason to combine in Col. 2, lines 9-15, which states that the overlay containing the first area may give additional area for advertising and other like branding features.

6. Applicant's arguments with respect to claim 8 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ROBERT E. CARTER III whose telephone number is (571)270-3006. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz can be reached on 571-272-3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2629

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sumati Lefkowitz/
Supervisory Patent Examiner, Art Unit 2629

/R.E.C/